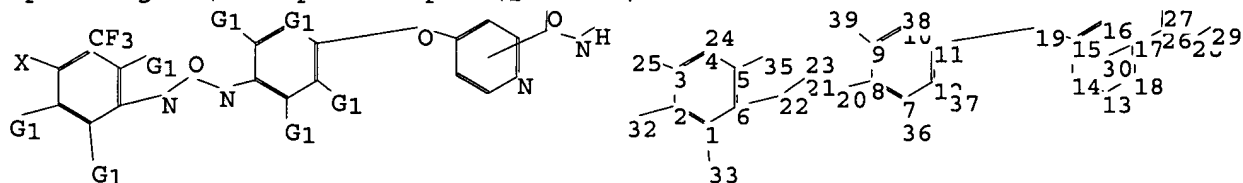


8/26/04

=>

Uploading C:\Stnexp4 corrupted\QUERIES\10071248.str



chain nodes :

19 20 21 22 23 24 25 26 27 28 29 32 33 35 36 37 38 39

ring nodes :

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

chain bonds :

1-33 2-32 3-25 4-24 5-35 6-22 7-36 8-20 9-39 10-38 11-19 12-37 15-19  
20-21 21-22 21-23 26-27 26-28 28-29

ring bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18  
14-15

15-16 16-17 17-18

exact/norm bonds :

1-33 2-32 5-35 6-22 7-36 8-20 9-39 10-38 11-19 12-37 15-19 20-21 21-22  
21-23 26-27 26-28

exact bonds :

3-25 4-24 28-29

normalized bonds :

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18  
14-15

15-16 16-17 17-18

G1:H,O

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom  
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS  
20:CLASS 21:CLASS  
22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS  
30:CLASS 32:CLASS  
33:CLASS 35:CLASS 36:CLASS 37:CLASS 38:CLASS 39:CLASS

L1 STRUCTURE UPLOADED

=> d l1

L1 HAS NO ANSWERS

L1 STR

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

Structure attributes must be viewed using STN Express query preparation.

10071248

8/26/04

=> s l1

SAMPLE SEARCH INITIATED 12:34:50 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 19 TO ITERATE

100.0% PROCESSED 19 ITERATIONS 0 ANSWERS  
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 119 TO 641  
PROJECTED ANSWERS: 0 TO 0

L2 0 SEA SSS SAM L1

=> s l1 ful

FULL SEARCH INITIATED 12:34:55 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 356 TO ITERATE

100.0% PROCESSED 356 ITERATIONS 4 ANSWERS  
SEARCH TIME: 00.00.01

L3 4 SEA SSS FUL L1

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	155.42	155.63

FILE 'CAPLUS' ENTERED AT 12:34:58 ON 26 AUG 2004  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 26 Aug 2004 VOL 141 ISS 9  
FILE LAST UPDATED: 25 Aug 2004 (20040825/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l3

L4 10 L3

=> d abs bib hitstr 1-10

L4 ANSWER 1 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN

10071248

8/26/04

AB Urea derivs. of formula A-NHCONH-B or pharmaceutically acceptable salts thereof [A = a substituted moiety of up to 40 carbon atoms of the formula -L-(M-L1)q; where L = a 5 or 6 membered cyclic structure bound directly to D; L1 = a substituted cyclic moiety having at least 5 members; M = a bridging group having at least one atom; q = an integer of 1-3; each cyclic structure of L and L1 contains 0-4 members of the group consisting of nitrogen, oxygen and sulfur; B = a substituted or unsubstituted, up to tricyclic aryl or heteroaryl moiety of up to 30 carbon atoms with at least one 6-member cyclic structure bound directly to D containing 0-4 members of the group consisting of nitrogen, oxygen and sulfur] are prepared These compds. are useful for raf mediated diseases, in particular a cancerous cell growth mediated by raf kinase. All compds. exemplified, e.g. N-[4-Chloro-3-(trifluoromethyl)phenyl]-N'-[4-[2-(N-methylcarbamoyl)-4-pyridyloxy]phenyl]urea, displayed IC50 of between 1 mM and 10  $\mu$ M.

AN 2003:874965 CAPLUS

DN 139:364958

TI Preparation of omega-carboxyaryl substituted diphenyl ureas as raf kinase inhibitors

IN Riedl, Bernd; Dumas, Jacques; Khire, Uday; Lowinger, Timothy B.; Scott, William J.; Smith, Roger A.; Wood, Jill E.; Monahan, Mary-Katherine; Natero, Reina; Renick, Joel; Sibley, Robert N.

PA Bayer Corporation, USA

SO U.S. Pat. Appl. Publ., 60 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003207872	A1	20031106	US 2002-42226	20020111
PRAI	US 2002-42226		20020111		

OS MARPAT 139:364958

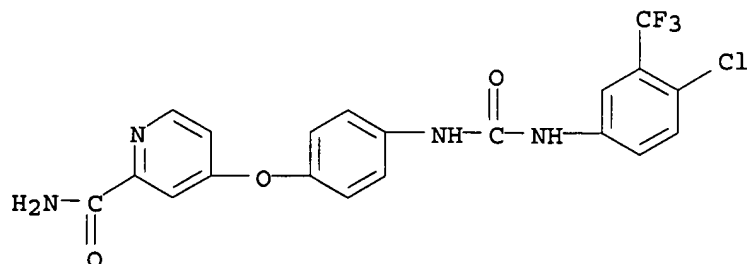
IT 284461-74-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of  $\omega$ -carboxyaryl substituted di-Ph ureas as raf kinase inhibitors for treating raf-mediated diseases such as cancerous cell growth)

RN 284461-74-1 CAPLUS

CN 2-Pyridinecarboxamide, 4-[4-[[[4-chloro-3-(trifluoromethyl)phenyl]amino]c carbonyl]amino]phenoxy]- (9CI) (CA INDEX NAME)



L4 ANSWER 2 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN

10071248

8/26/04

AB Aryl ureas of formula A-NHCONH-B [A = a substituted moiety of up to 40 carbon atoms of the formula: -L-(M-L1)<sub>q</sub> (where L = a 5 or 6 membered cyclic structure bound directly to D, L1 comprises a substituted cyclic moiety having at least 5 members; M = a bridging group having at least one atom; q = an integer of from 1-3; each cyclic structure of L and L1 contains 0-4 members of the group consisting of nitrogen, oxygen and sulfur); B = a substituted or unsubstituted, up to tricyclic aryl or heteroaryl moiety of up to 30 carbon atoms with at least one 6-member cyclic structure bound directly to D containing 0-4 members of the group consisting of nitrogen, oxygen and sulfur] are prepared. These urea derivs. are useful for treating raf mediated diseases, in particular cancerous cell growth mediated by raf kinase. Thus, N-[4-bromo-3-(trifluoromethyl)phenyl]-N'-[4-[2-(N-methylcarbamoyl)-4-pyridyloxy]phenyl]urea. Thus, a solution of 4-bromo-3-(trifluoromethyl)phenyl isocyanate (8.0 g, 30.1 mmol) in CH<sub>2</sub>Cl<sub>2</sub> (80 mL) was added dropwise to a solution of 4-[2-(N-methylcarbamoyl)-4-pyridyloxy]aniline (7.0 g, 28.8 mmol) in CH<sub>2</sub>Cl<sub>2</sub> (40 mL) at 0°, stirred at room temperature for 16 h, and filtered to give, after washing the yellow solids, washing with CH<sub>2</sub>Cl<sub>2</sub> (2 + 50 mL), and drying under reduced pressure (approx. 1 mmHg) at 40° to give N-[4-bromo-3-(trifluoromethyl)phenyl]-N'-[4-[2-(N-methylcarbamoyl)-4-pyridyloxy]phenyl]urea. All compds. exemplified showed IC<sub>50</sub> between 1 nM to 10 µM against raf kinase.

AN 2003:757329 CAPLUS

DN 139:276918

TI Preparation of omega-carboxyaryl substituted diphenyl ureas as raf kinase inhibitors

IN Riedl, Bernd; Dumas, Jacques; Khire, Uday; Lowinger, Timothy B.; Scott, William J.; Smith, Roger A.; Wood, Jill E.; Monahan, Mary-katherine; Natero, Reina; Renick, Joel; Sibley, Robert N.

PA Bayer Corporation, USA

SO U.S. Pat. Appl. Publ., 61 pp.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	US 2003181442	A1	20030925	US 2001-993647	20011127
PRAI	US 2001-993647		20011127		

OS MARPAT 139:276918

IT **284461-74-1P**, N-(4-Chloro-3-trifluoromethylphenyl)-N'-[4-[(2-carbamoyl-4-pyridyl)oxy]phenyl]urea

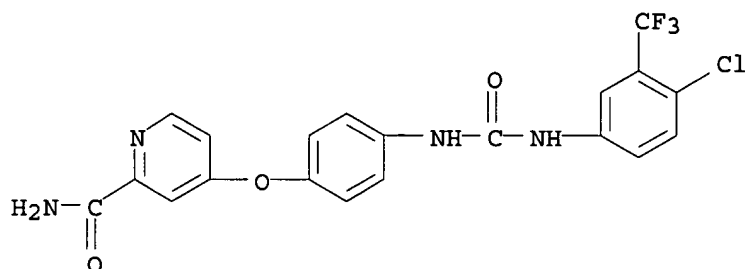
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of omega-carboxyaryl substituted di-Ph ureas as raf kinase inhibitors and anticancer agents)

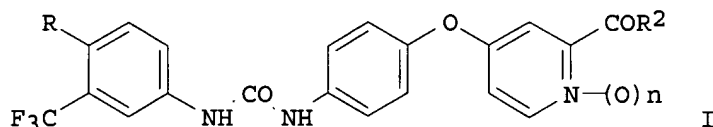
RN 284461-74-1 CAPLUS

CN 2-Pyridinecarboxamide, 4-[4-[[[4-chloro-3-(trifluoromethyl)phenyl]amino]carbonyl]amino]phenoxy]- (9CI) (CA INDEX NAME)

8/26/04



L4 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN  
GI



AB Aryl ureas, such as I [R = Cl, Br; R<sub>2</sub> = OH, NH<sub>2</sub>, NHMe, NHCH<sub>2</sub>OH, alkoxy; n = 0, 1], were prepared for use in pharmaceutical compns. for the treatment of raf kinase and p38 kinase mediated diseases. These ureas are useful for the treatment of inflammation, osteoporosis, angiogenesis disorders and hyper-proliferative disorders, such as cancer. Thus, urea I (R = Cl, R<sub>2</sub> = NHMe, n = 1) was prepared with 57% yield by N-oxidation of I (R = Cl, R<sub>2</sub> = NHMe, n = 0) using 3-chloroperbenzoic acid in CH<sub>2</sub>Cl<sub>2</sub> and THF. The prepared ureas were assayed for inhibition of p38 kinase and raf kinase, as well as for cancer cell growth inhibition in human cancer cell lines, such as HCT116 and DLD-1.

AN 2003:656745 CAPLUS

DN 139:197377

TI Preparation of aryl ureas for therapeutic use as kinase inhibitors

IN Dumas, Jacques; Scott, William J.; Chien, Du-Schieng; Lee, Wendy; Bjorge, Susan; Musza, Laszlo L.; Nassar, Ala; Riedl, Bernd

PA Bayer Corporation, USA

SO PCT Int. Appl., 64 pp.

CODEN: PIXXD2

DT Patent

LA English

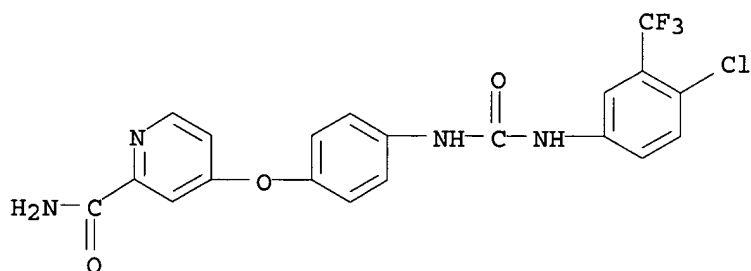
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003068746	A1	20030821	WO 2003-US4109	20030211
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC,			

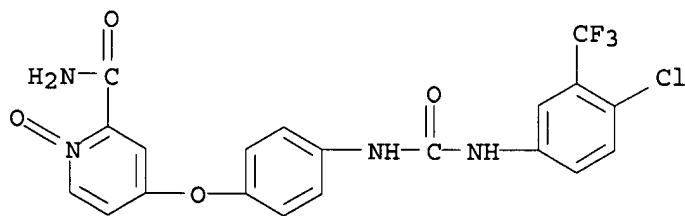
10071248

8/26/04

NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,  
ML, MR, NE, SN, TD, TG  
US 2003216446 A1 20031120 US 2003-361859 20030211  
PRAI US 2002-354937P P 20020211  
OS MARPAT 139:197377  
IT **284461-74-1P**, N-[4-Chloro-3-(trifluoromethyl)phenyl]-N'-[4-[2-carbamoyl(4-pyridyloxy)phenyl]urea **583840-04-4P**  
**583840-09-9P**  
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
(preparation of aryl ureas for therapeutic use as kinase inhibitors)  
RN 284461-74-1 CAPLUS  
CN 2-Pyridinecarboxamide, 4-[4-[[[4-chloro-3-(trifluoromethyl)phenyl]amino]carbonyl]amino]phenoxy]- (9CI) (CA INDEX NAME)

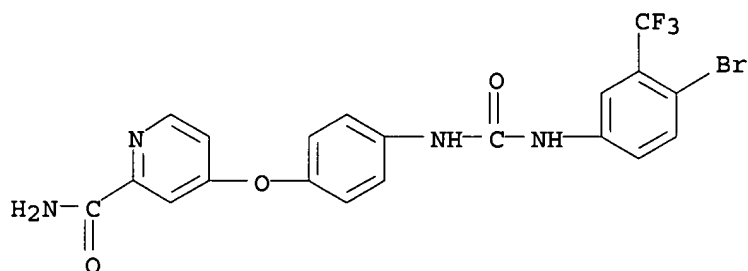


RN 583840-04-4 CAPLUS  
CN 2-Pyridinecarboxamide, 4-[4-[[[4-chloro-3-(trifluoromethyl)phenyl]amino]carbonyl]amino]phenoxy]-, 1-oxide (9CI) (CA INDEX NAME)



RN 583840-09-9 CAPLUS  
CN 2-Pyridinecarboxamide, 4-[4-[[[4-bromo-3-(trifluoromethyl)phenyl]amino]carbonyl]amino]phenoxy]- (9CI) (CA INDEX NAME)

8/26/04



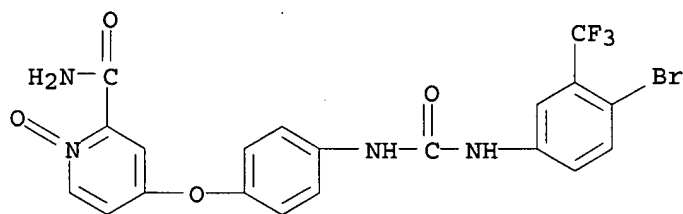
IT 583840-08-8P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aryl ureas for therapeutic use as kinase inhibitors)

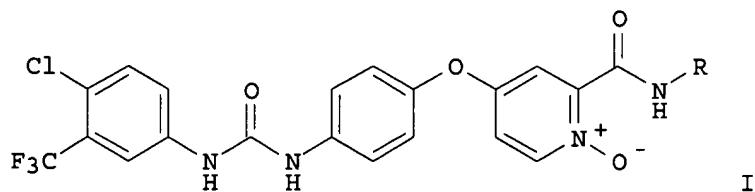
RN 583840-08-8 CAPLUS

CN 2-Pyridinecarboxamide, 4-[4-[[[4-bromo-3-(trifluoromethyl)phenyl]amino]carbonyl]phenoxy]-, 1-oxide (9CI) (CA INDEX NAME)



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN  
GI



I

AB The title ureas containing a pyridine, quinoline, or isoquinoline functionality which is oxidized at the nitrogen heteroatom MLBNHCONHA [A = (un)substituted Ph, naphthyl, 5-6 membered monocyclic heteroaryl, 8-10 membered bicyclic heteroaryl; B = (un)substituted phenylene, naphthylene, 5-6 membered monocyclic heteroarylene, 8-10 membered bicyclic heteroarylene; L = (CH<sub>2</sub>)<sub>m</sub>O(CH<sub>2</sub>)<sub>l</sub>, (CH<sub>2</sub>)<sub>m</sub>(CH<sub>2</sub>)<sub>l</sub>, (CH<sub>2</sub>)<sub>m</sub>CO(CH<sub>2</sub>)<sub>l</sub>, etc.; m, l = 0-4; M = (un)substituted pyridine-1-oxide, quinoline-1-oxide,

10071248

8/26/04

isoquinoline-1-oxide; with the provisos] which are useful in the treatment of (i) raf mediated diseases, for example, cancer, (ii) p38 mediated diseases such as inflammation and osteoporosis, and (iii) VEGF mediated diseases such as angiogenesis disorders, were claimed. Preparation of two ureas such as I [R = H, Me] which are not compds. of the invention, and have been distinguished from the compds. of the invention by a proviso, was described. Pharmaceutical composition comprising the title ureas was claimed.

AN 2003:656581 CAPLUS

DN 139:197370

TI Preparation of aryl ureas containing pyridine, quinoline and isoquinoline N-oxide functionality as kinase inhibitors

IN Dumas, Jacques; Scott, William J.; Riedl, Bernd

PA Bayer Corporation, USA

SO PCT Int. Appl., 67 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003068229	A1	20030821	WO 2003-US4110	20030211
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	US 2003216396	A1	20031120	US 2003-361850	20030211
PRAI	US 2002-354935P	P	20020211		

OS MARPAT 139:197370

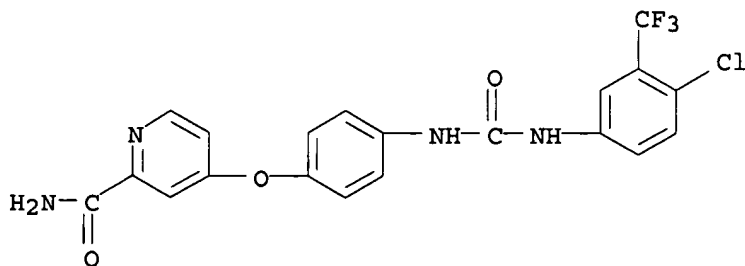
IT 284461-74-1P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation of aryl ureas containing pyridine, quinoline and isoquinoline N-oxide functionality as kinase inhibitors)

RN 284461-74-1 CAPLUS

CN 2-Pyridinecarboxamide, 4-[4-[[[4-chloro-3-(trifluoromethyl)phenyl]amino]c  
arbonyl]amino]phenoxy]- (9CI) (CA INDEX NAME)





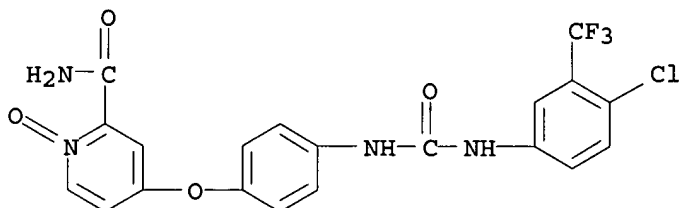
8/26/04

IT 583840-04-4P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of aryl ureas containing pyridine, quinoline and isoquinoline  
N-oxide functionality as kinase inhibitors)

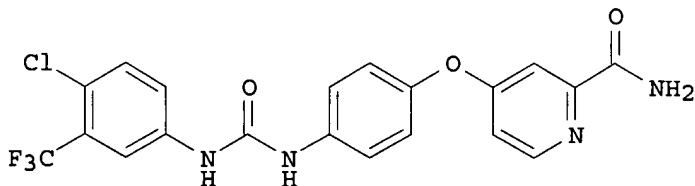
RN 583840-04-4 CAPLUS

CN 2-Pyridinecarboxamide, 4-[4-[[[4-chloro-3-(trifluoromethyl)phenyl]amino]c  
arbonyl]amino]phenoxy]-, 1-oxide (9CI) (CA INDEX NAME)



RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 5 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN  
GI



I

AB The title compds. ANHCONHB [A, B = (un)substituted Ph, naphthyl, 5-6  
membered monocyclic heteroaryl, etc.], useful for treating diseases  
mediated by the VEGF induced signal transduction pathway characterized by  
abnormal angiogenesis or hyperpermeability processes, were claimed.  
Prepns. of three title ureas are described. E.g., a 3-step synthesis of  
the urea I (starting from Me 4-chloro-2-pyridinecarboxylate  
hydrochloride), was given. The KDR (VEGFR2) assay for testing the title  
ureas is described.

AN 2003:656580 CAPLUS

DN 139:197369

TI Preparation of aryl ureas with angiogenesis inhibiting activity

IN Dumas, Jacques; Scott, William J.; Elting, James; Hatoum-Makdad, Holia

PA Bayer Corporation, USA

SO PCT Int. Appl., 83 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003068228	A1	20030821	WO 2003-US4103	20030211

10071248

8/26/04

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

US 2003207870 A1 20031106 US 2003-361858 20030211

PRAI US 2002-354950P P 20020211

OS MARPAT 139:197369

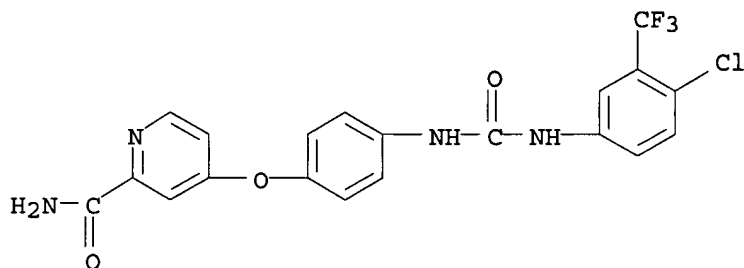
IT 284461-74-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of aryl ureas with angiogenesis inhibiting activity)

RN 284461-74-1 CAPLUS

CN 2-Pyridinecarboxamide, 4-[4-[[[4-chloro-3-(trifluoromethyl)phenyl]amino]carbonyl]amino]phenoxy]- (9CI) (CA INDEX NAME)



RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN

AB ADB [I; D = NHCONH; A = L(ML1)q; L = 5-6 membered cyclic structure bound directly to D; L1 = substituted cyclic moiety having ≥5 members, M = bridging group having ≥1 atom; q = 1-3; L, L1 contain 0-4 N, O, S; B = (substituted) up to tricyclic aryl, heteroaryl of ≤30 C atoms with ≥1 6-membered cyclic structure bound directly to D containing 0-4 N, O, S], were prepared Thus,

4-chloro-3-(trifluoromethyl)phenyl

isocyanate in CH<sub>2</sub>Cl<sub>2</sub> was added dropwise to a suspension of 4-[2-(N-methylcarbamoyl)-4-pyridyloxy]aniline (preparation given) in CH<sub>2</sub>Cl<sub>2</sub> at 0°; the resulting mixture was stirred at room temperature for 22 h. to afford N-[4-chloro-3-(trifluoromethyl)phenyl]-N'-[4-[2-(N-methylcarbamoyl)-4-pyridyloxy]phenyl]urea. I inhibited RAF kinase in the range 1 nM-1 μM. I pharmaceutical compns. are claimed.

AN 2003:590832 CAPLUS

DN 139:149528

TI Preparation of diphenylureas as RAF kinase inhibitors

IN Riedl, Bernd; Dumas, Jacques; Khire, Uday; Lowinger, Timothy B.; Scott, William J.; Smith, Roger A.; Wood, Jill E.; Monahan, Mary-katherine; Natero, Reina; Renick, Joel; Sibley, Robert N.

10071248

8/26/04

PA Bayer Corporation, USA

SO U.S. Pat. Appl. Publ., 62 pp., Cont. of U. S. Ser. No. 42,203.

CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2003144278	A1	20030731	US 2002-283248	20021030
PRAI	US 2001-367380P	P	20010112		
	US 2002-42203	A1	20020111		

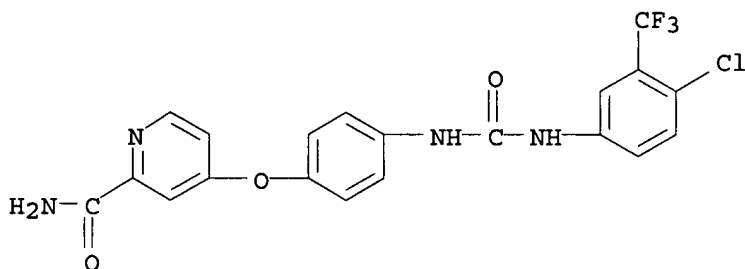
OS MARPAT 139:149528

IT **284461-74-1P**, N-[4-Chloro-3-(trifluoromethyl)phenyl]-N'-[4-(2-carbamoyl-4-pyridyloxy)phenyl]urea  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

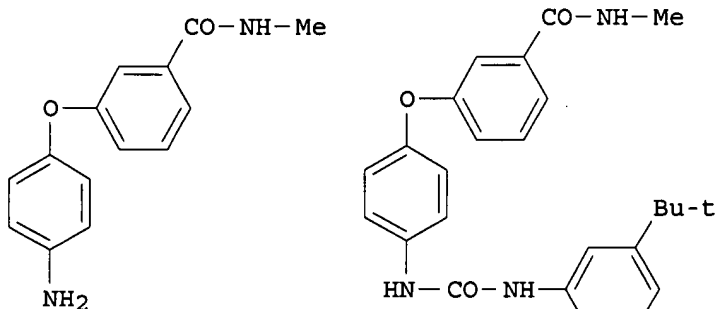
(preparation of diphenylureas as RAF kinase inhibitors)

RN 284461-74-1 CAPLUS

CN 2-Pyridinecarboxamide, 4-[4-[[[4-chloro-3-(trifluoromethyl)phenyl]amino]c  
arbonyl]amino]phenoxy]- (9CI) (CA INDEX NAME)



L4 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN  
GI



II

III

10071248

8/26/04

AB Title compds. B-NHCONH-L-(M-L1)q (I) [B = (un)substituted pyridyl, quinolinyl, isoquinolinyl; L = 5 or 6 membered cyclic structure; L1 = substituted cyclic moiety having at least 5 members; M = bridging group having at least one atom; q = 1-3; with proviso that L and L1 contain 0-4 hetero atoms, e.g., N, O and S] and their pharmaceutically acceptable salts were prepared For example, coupling of aniline II, e.g., prepared from Et 3-hydroxybenzoate in 4-steps, with bis(trichloromethyl)carbonate followed by 3-tert-butylaniline afforded urea III. In in vitro raf kinase assays, 112-specific examples of compds. I inhibited kinase activity with IC50 values ranging from 10 nM-10 µM. Compds. I are useful for the treatment of cancerous cell growth mediated by raf kinase.

AN 2002:850357 CAPLUS

DN 137:352907

TI Preparation of quinolyl, isoquinolyl or pyridyl-ureas as inhibitors of raf kinase for the treatment of tumors and/or cancerous cell growth

IN Dumas, Jacques; Riedl, Bernd; Khire, Uday; Wood, Jill E.; Robert, Sibley N.; Monahan, Mary-Katherine; Renick, Joel; Gunn, David E.; Lowinger, Timothy B.; Scott, William J.; Smith, Roger A.

PA Bayer Corporation, USA

SO U.S. Pat. Appl. Publ., 63 pp., Cont.-in-part of U.S. Ser. No. 758,548.  
CODEN: USXXCO

DT Patent

LA English

FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002165394	A1	20021107	US 2001-777920	20010207
	ZA 2001005751	A	20030714	ZA 2001-5751	20010712
	US 2002137774	A1	20020926	US 2001-907970	20010719
	WO 2002062763	A2	20020815	WO 2002-US3361	20020207
	WO 2002062763	A3	20021010		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 2003139605	A1	20030724	US 2002-71248	20020211
PRAI	US 1999-115877P	P	19990113		
	US 1999-257266	B2	19990225		
	US 1999-425228	B2	19991022		
	US 2001-758548	A2	20010112		
	US 1999-115878P	P	19990113		
	US 2001-777920	A	20010207		
	US 2001-948915	A1	20010910		

OS MARPAT 137:352907

IT 284461-74-1P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

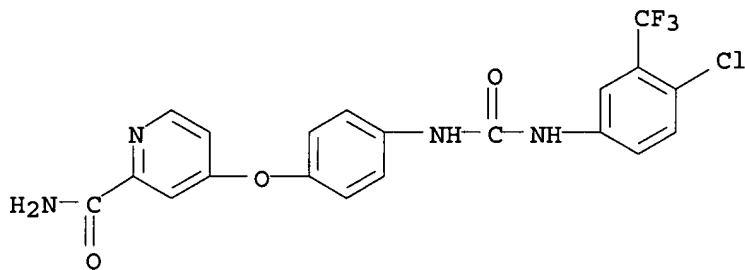
(drug candidate; preparation of quinolyl, isoquinolyl or pyridyl-ureas as inhibitors of raf kinase)

RN 284461-74-1 CAPLUS

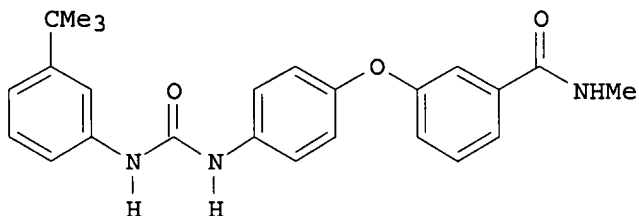
CN 2-Pyridinecarboxamide, 4-[4-[[[4-chloro-3-(trifluoromethyl)phenyl]amino]c  
arbonyl]amino]phenoxy]- (9CI) (CA INDEX NAME)

10071248

8/26/04



L4 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN  
GI



II

AB Title compds., e.g.,  $\text{RNHCONHZOR1}$  [I; R =  $\text{C}_6\text{H}_4(\text{CMe}_3)-3$ , 2-methoxy-5-trifluoromethylphenyl, 4-chloro-3-trifluoromethylphenyl, 2-methoxy-3-quinolyl, etc.; R1 = (un)substituted acylphenyl, -acylpyridinyl, etc.; Z = (un)substituted 1,3- or -1,4-phenylene] were prepared Thus, 4-( $\text{H}_2\text{N}$ ) $\text{C}_6\text{H}_4\text{OC}_6\text{H}_4(\text{CONHMe})-4$  (preparation given) was condensed with 3-( $\text{Me}_3\text{C}$ ) $\text{C}_6\text{H}_4\text{NH}_2$  and  $\text{CO}(\text{OCCl}_3)_2$  to give title compound II. Data for biol. activity of title compds. were given.

AN 2002:615574 CAPLUS

DN 137:169425

TI Preparation of N-aryl-N'-[(acylphenoxy)phenyl]ureas as raf kinase inhibitors

IN Dumas, Jacques; Riedl, Bernd; Khire, Uday; Wood, Jill E.; Sibley, Robert N.; Monahan, Mary-Katherine; Renick, Joel; Gunn, David E.; Lowinger, Timothy B.; Scott, William J.; Smith, Roger A.

PA Bayer Corporation, USA

SO PCT Int. Appl., 125 pp.

CODEN: PIXXD2

DT Patent

LA English

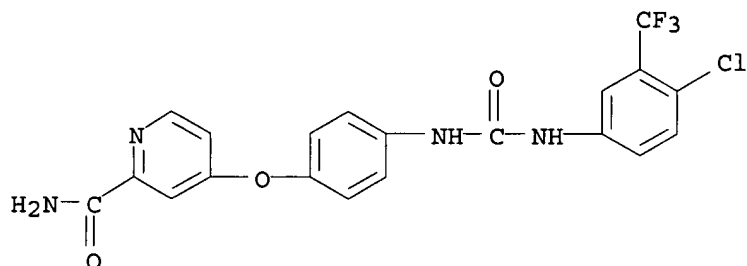
FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002062763	A2	20020815	WO 2002-US3361	20020207
	WO 2002062763	A3	20021010		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,			

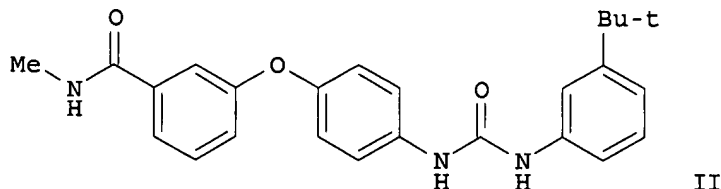
10071248

8/26/04

GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PH, PL,  
PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG,  
US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH,  
CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR,  
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG  
US 2002165394 A1 20021107 US 2001-777920 20010207  
PRAI US 2001-777920 A 20010207  
US 1999-115877P P 19990113  
US 1999-257266 B2 19990225  
US 1999-425228 B2 19991022  
US 2001-758548 A2 20010112  
OS MARPAT 137:169425  
IT 284461-74-1P  
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU  
(Therapeutic use); BIOL (Biological study); PREP (Preparation); USES  
(Uses)  
(preparation of N-aryl-N'-[(acylphenoxy)phenyl]ureas as raf kinase  
inhibitors)  
RN 284461-74-1 CAPLUS  
CN 2-Pyridinecarboxamide, 4-[4-[[[4-chloro-3-(trifluoromethyl)phenyl]amino]c  
arbonyl]amino]phenoxy]- (9CI) (CA INDEX NAME)



L4 ANSWER 9 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN  
GI



AB This invention relates to the preparation and use of (hetero)aryl ureas  
ANHCONHB [I; A = L(ML1)q; L = 5- or 6-membered (hetero)aryl, especially Ph or  
pyridinyl; M = bridging group; L1 = (hetero)aryl with at least one  
(un)substituted sulfamoyl, carboxy, or carbamoyl substituent; q = 1-3; B =  
certain (un)substituted mono- to tricyclic aryl or heteroaryl groups] for

10071248

8/26/04

the treatment of raf mediated diseases, such as cancer (no data). Approx. 100 invention compds. and numerous intermediates were prepared For instance, 3-tert-butylaniline was coupled with bis(trichloromethyl)carbonate to form the isocyanate, followed by addition of 4-(3-N-methylcarbamoylphenoxy)aniline (preparation given) to afford the urea II.

AN 2000:493516 CAPLUS

DN 133:120157

TI Preparation of  $\omega$ -carboxy(hetero)aryl substituted diphenyl ureas as raf kinase inhibitors

IN Riedl, Bernd; Dumas, Jacques; Khire, Uday; Lowinger, Timothy B.; Scott, William J.; Smith, Roger A.; Wood, Jill E.; Monahan, Mary-Katherine; Natero, Reina; Renick, Joel; Sibley, Robert N.

PA Bayer Corporation, USA

SO PCT Int. Appl., 120 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	----	-----	-----	-----
PI	WO 2000042012	A1	20000720	WO 2000-US648	20000112
	W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
	CA 2359510	AA	20000720	CA 2000-2359510	20000112
	AU 2000025016	A5	20000801	AU 2000-25016	20000112
	EP 1140840	A1	20011010	EP 2000-903239	20000112
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	EE 200100368	A	20030415	EE 2001-368	20000112
	JP 2003526613	T2	20030909	JP 2000-593580	20000112
	BR 2000007487	A	20030923	BR 2000-7487	20000112
	US 2001011135	A1	20010802	US 2001-773659	20010202
	US 2001011136	A1	20010802	US 2001-773675	20010202
	US 2001016659	A1	20010823	US 2001-773672	20010202
	US 2001027202	A1	20011004	US 2001-773658	20010202
	US 2001034447	A1	20011025	US 2001-773604	20010202
	NO 2001003463	A	20010912	NO 2001-3463	20010712
	ZA 2001005751	A	20030714	ZA 2001-5751	20010712
	US 2002137774	A1	20020926	US 2001-907970	20010719
	BG 105763	A	20020329	BG 2001-105763	20010801
	HR 2001000580	A1	20020831	HR 2001-580	20010802
	US 2002042517	A1	20020411	US 2001-948915	20010910
	US 2003139605	A1	20030724	US 2002-71248	20020211
PRAI	US 1999-115877P	P	19990113		
	US 1999-257266	A2	19990225		
	US 1999-425228	A2	19991022		
	US 1999-115878P	P	19990113		
	WO 2000-US648	W	20000112		
	US 2001-948915	A1	20010910		
OS	MARPAT 133:120157				
IT	284461-74-1P, N-[4-Chloro-3-(trifluoromethyl)phenyl]-N'-[4-(2-				

10071248

8/26/04

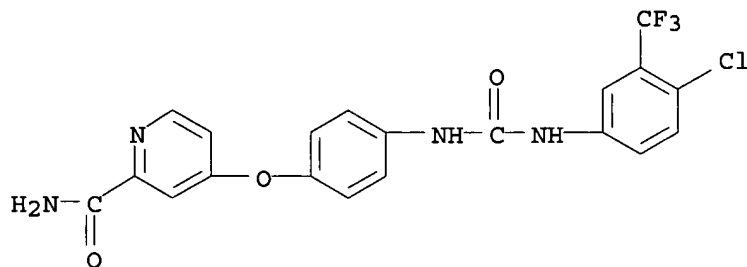
carbamoyl-4-pyridyloxy)phenyl]urea

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)

(preparation of  $\omega$ -carboxy(hetero)aryl substituted di-Ph urea raf kinase inhibitors by reacting arylisocyanates with arylamines)

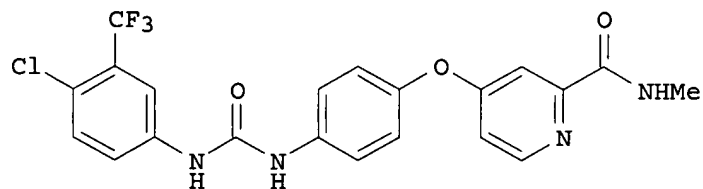
RN 284461-74-1 CAPLUS

CN 2-Pyridinecarboxamide, 4-[4-[[[4-chloro-3-(trifluoromethyl)phenyl]amino]c carbonyl]amino]phenoxy]- (9CI) (CA INDEX NAME)



RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 10 OF 10 CAPLUS COPYRIGHT 2004 ACS on STN  
GI



II

AB The title compds. ADB [I; D = NHCONH; A = substituted moiety of up to 40 carbon atoms of the formula L(ML1)q (wherein L = 5-6 membered cyclic structure; L1 = substituted cyclic moiety having at least 5 members; M = bridging group having at least one atom; q = 1-3; each of L and L1 contains 0-4 members of the group consisting of N, O and S); B = (un)substituted up to tricyclic aryl or heteroaryl moiety of up to 30 carbon atoms with at least one 6-member cyclic structure bound directly to D containing 0-4 members of the group consisting of N, O and S], useful in treating p38 mediated diseases, were prepared E.g., a multi-step synthesis of the urea II which showed IC50 of 1-10  $\mu$ M against p38, was given. Compds. I are effective at 0.01-200 mg/kg/day (oral administration).

AN 2000:493376 CAPLUS

DN 133:120155

TI Preparation of  $\omega$ -carboxy aryl substituted diphenyl ureas as p38 kinase inhibitors

IN Riedl, Bernd; Dumas, Jacques; Khire, Uday; Lowinger, Timothy B.; Scott,

10071248



8/26/04

William J.; Smith, Roger A.; Wood, Jill E.; Monahan, Mary-Katherine;  
Natero, Reina; Renick, Joel; Sibley, Robert N.

PA Bayer Corporation, USA  
SO PCT Int. Appl., 148 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2000041698	A1	20000720	WO 2000-US768	20000113
	W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
	CA 2359244	AA	20000720	CA 2000-2359244	20000113
	EP 1158985	A1	20011205	EP 2000-905597	20000113
	R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO			
	US 2003139605	A1	20030724	US 2002-71248	20020211
	US 2003105091	A1	20030605	US 2002-86417	20020304
PRAI	US 1999-115878P	P	19990113		
	US 1999-257265	A2	19990225		
	US 1999-425229	A2	19991022		
	US 1999-115877P	P	19990113		
	US 1999-257266	B2	19990225		
	US 1999-425228	B1	19991022		
	WO 2000-US768	W	20000113		
	US 2001-948915	A1	20010910		

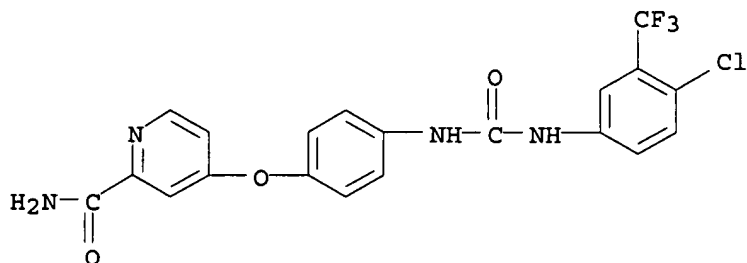
OS MARPAT 133:120155

IT 284461-74-1P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(preparation of  $\omega$ -carboxy aryl substituted di-Ph ureas as p38 kinase inhibitors)

RN 284461-74-1 CAPLUS

CN 2-Pyridinecarboxamide, 4-[4-[[[4-chloro-3-(trifluoromethyl)phenyl]amino]carbonyl]amino]phenoxy]- (9CI) (CA INDEX NAME)



10071248

RE.CNT 1        THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD  
ALL CITATIONS AVAILABLE IN THE RE FORMAT

SINCE FILE	TOTAL
ENTRY	SESSION
52.00	207.63

SINCE FILE	TOTAL
ENTRY	SESSION
-7.00	-7.00

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

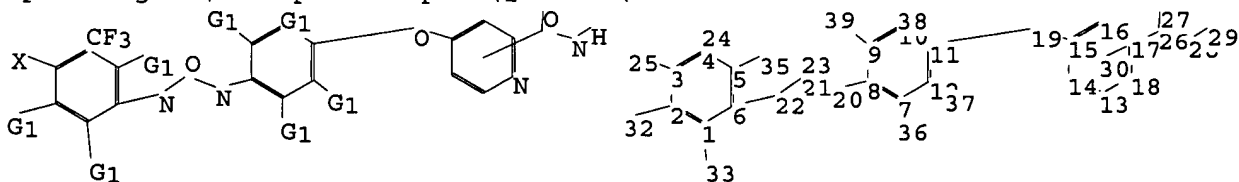
TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:  
<http://www.cas.org/ONLINE/DBSS/registryss.html>

Uploading C:\Stnexp4 corrupted\QUERIES\10071248.str



19 20 21 22 23 24 25 26 27 28 29 32 33 35 36 37 38 39

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----

1-33 2-32 3-25 4-24 5-35 6-22 7-36 8-20 9-39 10-38 11-19 12-37 15-19

ring bonds :

10071248

8/26/04

1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18  
14-15  
15-16 16-17 17-18  
exact/norm bonds :  
1-33 2-32 5-35 6-22 7-36 8-20 9-39 10-38 11-19 12-37 15-19 20-21 21-22  
21-23 26-27 26-28  
exact bonds :  
3-25 4-24 28-29  
normalized bonds :  
1-2 1-6 2-3 3-4 4-5 5-6 7-8 7-12 8-9 9-10 10-11 11-12 13-14 13-18  
14-15  
15-16 16-17 17-18

G1:H,O

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom  
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:CLASS  
20:CLASS 21:CLASS  
22:CLASS 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS  
30:CLASS 32:CLASS  
33:CLASS 35:CLASS 36:CLASS 37:CLASS 38:CLASS 39:CLASS

L5 STRUCTURE UPLOADED

=> d 15

L5 HAS NO ANSWERS

L5 STR

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

Structure attributes must be viewed using STN Express query preparation.

=> s 15

SAMPLE SEARCH INITIATED 12:41:27 FILE 'REGISTRY'  
SAMPLE SCREEN SEARCH COMPLETED - 19 TO ITERATE

100.0% PROCESSED 19 ITERATIONS  
SEARCH TIME: 00.00.01

0 ANSWERS

FULL FILE PROJECTIONS: ONLINE \*\*COMPLETE\*\*  
BATCH \*\*COMPLETE\*\*  
PROJECTED ITERATIONS: 119 TO 641  
PROJECTED ANSWERS: 0 TO 0

L6 0 SEA SSS SAM L5

=> s 15 ful

FULL SEARCH INITIATED 12:41:31 FILE 'REGISTRY'  
FULL SCREEN SEARCH COMPLETED - 356 TO ITERATE

100.0% PROCESSED 356 ITERATIONS  
SEARCH TIME: 00.00.01

4 ANSWERS

10071248

8/26/04

L7

4 SEA SSS FUL L5

**THIS PAGE BLANK (USPTO)**

10071248